



# State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF AIR QUALITY

**FILE COPY**

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DAQE-523-01

June 28, 2001

S. Gale Chapman, President  
Intermountain Power Service Corporation  
850 West Brush Wellman Road  
Delta, Utah 84624

Dear Mr. Chapman:

Re: Consolidation of Approval Orders for Intermountain Generating Station  
Millard County, Utah - CDS-A, ATT, Title V, NSPS  
Project Code: N0327-006

The attached document is an Approval Order for the above-referenced project.

Future correspondence on this Approval Order should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Nando Meli. He may be reached at (801) 536-4052.

Sincerely,

  
Richard W. Sprott, Executive Secretary  
Utah Air Quality Board

RWS:NM:re

cc: Millard County Health Dept.  
Mike Owens, Region VIII

**STATE OF UTAH**

**Department of Environmental Quality**

**Division of Air Quality**

**CONSOLIDATION OF APPROVAL ORDERS FOR  
INTERMOUNTAIN GENERATING STATION**

**Prepared By: Nando Meli, Engineer  
(801) 536-4052**

**APPROVAL NUMBER**

**DAQE-523-01**

**Date: June 28, 2001**

**Source Contact  
S. Gale Chapman  
(435) 864-6494**

**Intermountain Power Service Corporation**

**Richard W. Sprott  
Executive Secretary  
Utah Air Quality Board**

### Abstract

*Intermountain Power Service Corporation (IPSC) operates the Intermountain Generating Station (IGS) coal fired steam-electric plant that is located near Delta in Millard County. IPSC is requesting a single Approval Order to be issued that would resemble their Title V Operating Permit. It would also combine pertinent criteria from previous AOs and correct deficiencies between the AOs and the Title V operating permit for (IGS) in Delta. There will be no change in equipment, processes or emissions from the consolidation of the AOs issued to IPSC. Therefore, a public comment period will not be required. Millard County is an attainment area of the National Ambient Air Quality Standards (NAAQS) for all pollutants. New Source Performance Standards (NSPS), Subpart Da applies to this source. Title V of the 1990 Clean Air Act applies to this source. There will be no additional requirements resulting from the consolidation of the AOs. The Title V permit will be administratively amended after this AO has been issued.*

The project has been evaluated and found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). This air quality Approval Order (AO) authorizes the project with the following conditions, and failure to comply with any of the conditions may constitute a violation of this order.

#### General Conditions:

1. This Approval Order (AO) applies to the following company:

Intermountain Power Service Corporation  
850 West Brush Wellman Road  
Delta, Utah 84624  
Phone Number: (435) 864-4414  
Fax Number: (435) 864-4970

The equipment listed below in this AO shall be operated at the following location:

#### PLANT LOCATION:

850 West Brush Wellman Road, Delta, Millard County, Utah

Universal Transverse Mercator (UTM) Coordinate System: datum NAD27  
4,374.4 kilometers Northing, 364.2 kilometers Easting, Zone 12

2. Definitions of terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code Rule 307 (UAC R307), and Title 40 of the Code of Federal Regulations (40 CFR). These definitions take precedence, unless specifically defined otherwise herein.
3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401.
4. Any future changes or modifications to the equipment and processes approved by this AO that could affect the emissions covered by this AO must be approved in accordance with R307-401-1.

5. All records referenced in this AO or in applicable NSPS which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. All records shall be kept for a minimum period of two years. Emission inventories shall be kept for a period of five years from the due date of each emission statement or until the next inventory is due, whichever is longer.
6. Intermountain Power Service Corporation (IPSC) shall conduct its operations of the Intermountain Generating Station (IGS) coal fired electric steam plant in accordance with the terms and conditions of this AO, which was written pursuant to 's Notice of Intent submitted to the Division of Air Quality (DAQ) on February 5, 2001, and additional information submitted to the DAQ on June 11, 2001, June 13, 2001, and June 18, 2001.
7. This AO shall supersede all AO's and preconstruction permits previously assigned to the IPSC site, which shall include but is not limited to the following AOs:

AO without an assigned number dated February 11, 1987  
 BAQE-0873-1 dated April 28, 1987  
 BAQE-102-87 dated December 7, 1987  
 DAQE-0824-92 dated September 4, 1992  
 DAQE-0779-93 dated September 15, 1993  
 DAQE-028-97 dated January 8, 1997

This AO shall not supersede the Experimental AO's issued for the IGS located in Millard County.

8. The approved installations shall consist of the following equipment or equivalent\*:
  - A. Unit #1 Coal Fired Boiler  
Rating - 8,500 x 10<sup>6</sup> Btu/hr (MMBTU/hr)
  - B. Unit #2 Coal Fired Boiler  
Rating - 8,500 MMBTU/hr
  - C. Coal railcar unloading dust collector 1A
  - D. Coal railcar unloading dust collector 1B
  - E. Coal railcar unloading dust collector 1C
  - F. Coal railcar unloading dust collector 1D
  - G. Coal truck unloading dust collector 2
  - H. Coal reserve reclaim dust collector 3
  - I. Coal transfer building #1 dust collector 4
  - J. Coal transfer building #2 dust collector 5
  - K. Coal transfer building #4 dust collector 6
  - L. Coal crusher building dust collector 11
  - M. U1 Generation building coal dust collector 13A
  - N. U1 Generation building coal dust collector 13B

O. U2 Generation building coal dust collector 14A  
P. U2 Generation building coal dust collector 14B  
Q. Coal pile active and reserve  
R. Coal Stackout  
S. Fuel oil tank 1A  
Capacity - 675,000 gallons  
T. Fuel oil tank 1B  
Capacity - 675,000 gallons  
U. Limestone unloading dust collector 1A  
V. Limestone unloading dust collector 1B  
W. Limestone transfer dust collector 1  
X. Limestone reclaim dust collector 2  
Y. Limestone silo bin vent filter  
Z. Limestone crusher dust collector 3  
AA. Limestone preparation dust collector 4  
BB. Limestone storage pile  
CC. Lime silo dust collector 1  
DD. Lime hopper dust collector 2  
EE. Soda ash silo dust collector 3  
FF. Soda ash hopper dust collector 4  
GG. Fly ash silo bin vent filter 1A  
HH. Fly ash silo bin vent filter 1B  
II. Combustion byproducts stackout & stockpile  
JJ. Combustion byproducts landfill  
KK. Unit 1 cooling tower 1A  
LL. Unit 1 cooling tower 1B  
MM. Unit 2 cooling tower 1A  
NN. Unit 2 cooling tower 1B  
OO. Coal sample preparation building dust collector  
PP. Sandblast facility dust collector  
QQ. U1 Generation building vacuum cleaning dust collector  
RR. U2 Generation building vacuum cleaning dust collector  
SS. U1 Fabric filter vacuum cleaning dust collector  
TT. U2 Fabric filter vacuum cleaning dust collector  
UU. GSB vacuum cleaning dust collector  
VV. Guzzler truck dust collector  
WW. Emergency generators  
1A 4,000 Hp diesel  
1B 4,000 Hp diesel  
1C 4,000 Hp diesel  
XX. Solvent washers  
YY. Diesel driven fire pump rated at 290 Hp 1B  
ZZ. Diesel driven fire pump rated at 290 Hp 1C

- AAA. Auxiliary boiler 1A  
Rating - 166 MMBTU/hr
- BBB. Auxiliary boiler 1B  
Rating - 166 MMBTU/hr
- CCC. Coal Conveyors
- DDD. Paint booth/shops
- EEE. Engine driven equipment including compressors, generators, hydraulic pumps and diesel fire pumps
- FFF. Bulb recycling crusher
- GGG. Laboratory fume hoods
- HHH. Gasoline tank  
Capacity - 500 gallons
- III. Diesel tank  
Capacity - 10,000 gallons
- JJJ. Diesel day tanks  
Capacity - not exceeding 560 gallons per tank
- KKK. Mobile oil storage tanks  
Capacity - not exceeding 12,000 gallons per tank
- LLL. Turbine lube oil units  
Capacity - not exceeding 40,000 gallons per unit
- MMM. Underground storage diesel tank  
Capacity - 20,000 gallons
- NNN. Underground storage gasoline tank  
Capacity - 6,000 gallons
- OOO. Used oil tank  
Capacity - 10,000 gallons
- PPP. Class III Industrial Waste Landfill
- QQQ. Paved haul road
- RRR. Haul road and access road
- SSS. Coal truck unloading grating

\* Equivalency shall be determined by the Executive Secretary.

#### Limitations and Tests Procedures

9. Emissions to the atmosphere at all times from the indicated emission points shall not exceed the following rates and concentrations:

#### **Main Boilers**

<u>Pollutant</u>	<u>lb/ 10<sup>6</sup> BTU heat input</u>
PM <sub>10</sub> .....	0.020 lb/ 10 <sup>6</sup> BTU heat input
SO <sub>2</sub> .....	0.150 lb/ 10 <sup>6</sup> BTU heat input
	10.0 % of the combustion concentration
NO <sub>x</sub> .....	0.500 lb/ 10 <sup>6</sup> BTU heat input

**Dust Collectors**

<u>Pollutant/Source</u>	<u>grains/dscf</u>
PM <sub>10</sub>	
Rail car unloading (4 units) . . . . .	0.024 (each unit)
Transfer building one . . . . .	0.024
Unit one 13A . . . . .	0.024
Transfer building two . . . . .	0.024
Transfer building four . . . . .	0.024
Crusher building one . . . . .	0.024
Unit one 13B . . . . .	0.024
Unit two 14A . . . . .	0.024
Unit two 14B . . . . .	0.024
Limestone preparation building . . . . .	0.024

**Auxiliary Boilers**

<u>Pollutant</u>	<u>lb/ 10<sup>6</sup> BTU heat input</u>	<u>lbs/hr</u>
PM <sub>10</sub> . . . . .	0.10 . . . . .	20
SO <sub>2</sub> . . . . .	0.69 . . . . .	100
NO <sub>x</sub> . . . . .	0.35 . . . . .	58

10. Visible emissions from the following emission points shall not exceed the following values:

- A. All abrasive blasting - 40% opacity
- B. All other points - 20% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

For sources that are subject to NSPS opacity standards shall be determined by conducting observations in accordance with 40 CFR 60.11(b) and 40 CFR 60, Appendix A, Method 9.

11. The following consumption limit shall not be exceeded:

- A. 50,000 barrels of fuel oil consumed per calendar year in the auxiliary boilers.

To determine compliance with annual limit, the owner/operator shall calculate a total by the January 20th of each year using data from the previous 12 months. Records of consumption shall be kept for all periods when the plant is in operation. Consumption shall be determined by fuel oil totalizer records. The records of consumption shall be kept on a monthly basis.

12. The emergency generators shall be operated on an emergency basis only, except for routine engine maintenance and testing. Records documenting generator usage shall be kept in a log and they shall show the date the generator was used, the duration in hours of the of generator usage, and the reason for each generator usage
13. The diesel driven fire pumps shall be operated on an emergency basis only, except for routine engine and fire system maintenance and testing. Records documenting diesel driven fire pump usage shall be kept in a log and they shall show the date the diesel driven fire pump was used, the duration in hours of the of diesel driven fire pump, and the reason for each diesel driven fire pump usage

#### **Roads and Fugitive Dust**

14. IPSC shall abide by a fugitive dust control plan acceptable to the Executive Secretary for control of all dust sources associated with the Intermountain Power Generation site. IPSC shall submit a fugitive dust control plan to the Executive Secretary, attention: Compliance Section, for approval within 30 days of the date of this AO. This plan shall contain sufficient controls to prevent an increase in PM<sub>10</sub> emissions above those modeled for this AO.

The haul road length, speed or any other parameter used to calculate emissions shall not be increased above the limits established in the fugitive dust control plan. The haul road speed shall be posted as in the fugitive dust control plan.

15. The facility shall abide by all applicable requirements of R307-205 for Fugitive Emission and Fugitive Dust sources.

#### **Fuels**

16. The sulfur content of any fuel oil combusted shall not exceed:
  - A. 0.85 lb per MMBTU heat input for fuel oil used in the main boilers.
  - B. 0.58 percent by weight for fuel oil combusted in the auxiliary boilers.

The sulfur content shall be determined by ASTM Method D-4294-89 or approved equivalent. Certification of used oil shall be either by IPSC's own testing or test reports from the fuel oil marketer.

#### **Federal Limitations and Requirements**

17. In addition to the requirements of this AO, all applicable provisions of 40 CFR 60, New Source Performance Standards (NSPS) Subpart A, 40 CFR 60.1 to 60.18 and Subpart Da, 40 CFR 60.4 to 60.49a (Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978) apply to this installation.

Subpart Y, 40 CFR 60.250 to 60.254 (Standards of Performance for Coal Preparation Plants apply to this installation.



Records & Miscellaneous

18. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this Approval Order including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. Scheduled and unscheduled maintenance performed on equipment authorized by this AO shall be recorded, and the records shall be maintained for a period of two years.
19. The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring.
20. The owner/operator shall comply with R307-107. General Requirements: Unavoidable Breakdowns..

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307.

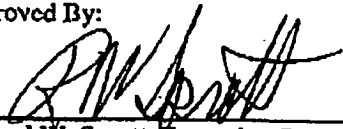
A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site: [http://www.eq.state.ut.us/eqair/aq\\_home.htm](http://www.eq.state.ut.us/eqair/aq_home.htm)

The annual emission estimations below include point source, fugitive emissions, fugitive dust and do not include road dust, tail pipe emissions, grandfathered emissions etc.. These emissions are for the purpose of determining the applicability of Prevention of Significant Deterioration, nonattainment area, maintenance area, and Title V source requirements of the R307. They are not to be used for determining compliance.

The Potential To Emit (PTE) emissions for the IPSC power generation plant are currently calculated at the following values:

	<u>Pollutant</u>	<u>Tons/yr</u>
A.	PM <sub>10</sub> .....	248.88
B.	SO <sub>2</sub> .....	3,698.32
C.	NO <sub>x</sub> .....	24,178.63
D.	CO .....	1,312.44
E.	VOC .....	14.29
F.	HAPs .....	82.67

Approved By:



Richard W. Sprott, Executive Secretary  
Utah Air Quality Board